

Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

A FURTHER CONTRIBUTION TO THE KNOWLEDGE OF THE ORTHOPTERA OF ARGENTINA.

BY JAMES A. G. REHN.

In these Proceedings there recently appeared a paper by the present author entitled, "A Contribution to the Knowledge of the Orthoptera of Argentina." This study was based wholly on material collected by Mr. P. Jorgensen, of Buenos Aires, and submitted to us for study by that gentleman and Mr. Esben Petersen, of Silkeborg, Denmark. Since the appearance of the above-mentioned paper, several additional collections from Argentina, made almost wholly by Mr. Jorgensen, have been received from the same persons and, in addition, a small but very interesting series from Mr. Carlos Lizer, of Buenos Aires.

The combined material represents quite a few localities supplementary to those given in the previous paper, while thirty-eight species are additional to the one hundred and sixty-two there discussed.

The total number of species here treated is one hundred and fourteen, of which nineteen are now recorded from Argentina for the first time, while three species are new to science. The number of specimens in the present series is four hundred and fifty-eight.

In the tabulation given on page 275 of our previous paper, there can be added to the forty-nine species known in Argentina only from the Misiones Territory, ten of the eighteen here first recorded from Argentina. This is directly in line with the previously indicated evidence of the richness and Brazilian affinity of the Misiones region.

The forms here first recorded from Argentina are indicated by an asterisk preceding the specific name.

The types of the new species and an adequate representation of the other forms in the collection have been retained for the Academy series. We wish to thank Messrs. Jorgensen, Lizer and Petersen for their interest and courtesy in submitting the present material to us for study.

¹ These Proceedings, 1913, pp. 273–379.

DERMAPTERA.

Family LABIDURIDÆ.

Labidura xanthopus (Stål).

La Cumbre, Prov. of Cordoba. (Lizer.) One male.

This individual is identical with, though very slightly smaller than, the specimen from Puerto Bertoni, Paraguay, recorded by us as Demogorgon batesi.² Burr³ now considers the genera Labidura and Demogorgon to be inseparable and synonymizes batesi of Kirby under the older name xanthopus, which action, as far as we can determine from our material and the literature, is correct. Stål described the species from Rio Janeiro and Buenos Aires, while Borelli has recorded it from Salta, province of Salta, Argentina.

Family LABIIDÆ.

Labia minor (Linnæus).

Buenos Aires. (Lizer.) One male.

The only previous Argentine record for this widespread species is from Concordia (Borelli, Bollet. Mus. Zool. Anat. Comp. Torino, XVII, No. 418, p. 6).

Family FORFICULIDÆ.

Doru lineare (Eschsch.).

Misiones. January, 1911. (Jorgensen.) Two males, four females.

ORTHOPTERA (s. s.).

Family BLATTIDÆ.

Subfamily PSEUDOMOPINÆ.

Pseudomops neglecta Shelford.

January 1, 1911, March 31, 1909, December 10, 1909. Misiones. Three males, one female. (Jorgensen.)

Florincia, Rio Tapenaga, Province of Santa Fé. Two females.

Alto Pencosa, Province of San Luis. December 20-22, 1908. (Jorgensen; from composite Ximenedia microptera.) Five males.

In none of the above-listed males is there any trace of the pale antennal annulus referred to by Shelford and Rehn as occurring in the female. The single female here listed lacks the greater portion of the antennæ. The latter specimen has the tegmina quite piceous. with only the marginal field and the edging of the region of the costal

<sup>Entom. News, XXII, p. 247.
Trans. Entom. Soc. London, 1910, p. 185.</sup>

veins straw colored, although the coloration of the pronotal disk and of the limbs is normal. The Alto Pencosa and Florincia specimens have the region of the costal veins of the tegmina almost as yellowish as the pronotal margin. The range of the species is extended considerably westward by the Alto Pencosa record.

Ischnoptera rufa Brunner.

Misiones. December 8, 1909. (Jorgensen.) One male.

Ischnoptera vilis Saussure.

Buenos Aires. (Lizer.) One male.

La Cumbre, Prov. of Cordoba. (Lizer.) One male, one female.

Misiones. January, 1911. (Jorgensen.) One male.

The above males have been compared with Paraguayan specimens of the same sex. The Buenos Aires individual has the interocular portion of the occiput quite rufescent, a condition not found in any of the other specimens examined. The female, which sex was previously unknown, has abbreviate lateral non-attingent sublanceolate tegmina, much as in the North American *I. johnsoni*, from which it can be readily separated by the slenderer build, relatively larger and broader head, more transverse pronotum, more tapering tegmina and shorter, more robust cerci. The measurements of the female are as follows: length of body, 14.8 mm.; length of pronotum, 4.2; greatest width of pronotum, 5.5; length of tegmen, 3.6.

The only previous record of the species from Argentina is that from Corrientes by Saussure.

Ischnoptera marginata Brunner.4

Misiones. January, 1911, December, 1910, December 1 and 20, 1910. (Jorgensen.) Two males, four females.

Ischnoptera brasiliensis Brunner.

Misiones. January 5 and 29, 1910, December, 1909. (Jorgensen.) Three males.

La Cumbre, Prov. of Cordoba. (Lizer.) Two males.

Mendoza, Prov. of Mendoza. (A. C. J. Haarup.) 1904–1905, November 20, 1906. Two males.

The La Cumbre and Mendoza records are the most southern for the species.

⁴Very probably Blatta fusca Saussure (Revue et Magasin de Zoologie, (2), XXI, p. 110 (1869)—"Ager Argentinus," later given with exactness as Corrientes) is a synonym of this species. Shelford places it in Blattella, but the description and measurements agree very completely with Brunner's marginata, which has four years' priority.

Blattella germanica (Linnæus).

Misiones. July 30, 1909. (Jorgensen.) One male.

Mendoza, Prov. of Mendoza. (A. C. J. Haarup.) One male.

Buenos Aires. (Lizer.) One male, one female.

*Blattella conspersa Brunner.

Misiones. January, 1911. (Jorgensen.) One male.

This specimen fully agrees with the original description of the species, previously known only from Brazil and Sapucay, Paraguay.

Ceratinoptera puerilis new species.

Type: o³; Misiones, Argentina. July 30, 1909. (P. Jorgensen.) [Acad. Nat. Sci. Phila., type no. 5230.]

In general form this species is apparently closest to *C. otomia* (Saussure)⁵ from Mexico, from which, however, it differs in the larger size, the more extensive tegmina, which reach to the base of the fifth abdominal segment, the more rounded distal margin of the tegmina, the emarginate supra-anal plate and the different coloration.

Size medium; form subovoid; surface polished. Head with only the outline of the occiput visible cephalad of the pronotum; eyes separated by nearly twice their width; antennæ in length exceeding the body. Pronotum transverse; cephalic and lateral margins regularly arcuate, very faintly flattened dorsad of the head, caudal margin arcuato-truncate. Tegmina slightly more than one and one-half times as long as the pronotum, reaching to the base of

the fifth abdominal segment, broad, the greatest width subequal to the length of the pronotum and contained one and one-half times in the tegminal length; costal margin very gently arcuate, strongly rounding distad to the broadly rounded distal margin, sutural margin nearly straight; marginal field broad and short, anal field subpyriform, the anal sulcus reaching the sutural margin nearly two-thirds the length of the latter from the base; venation distinct, discoidal vein with six rami toward the costal and disto-costal margin. minute. Abdomen from near the base narrowing in width distad; supra-anal plate transverse, moderately produced mesad,

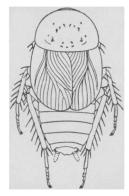


Fig. 1.—Ceratinoptera puerilis new species.
Dorsal outline of type.
(× 3.)

⁵ Revue et Magasin de Zoologie, (2), XX, p. 98 (1868).

arcuato-emarginate laterad, distinctly but shallowly V-emarginate mesad; cerci damaged; subgenital plate transverse, emarginato-truncate mesad, provided laterad with articulate styles of moderate length. Cephalic femora with the ventro-cephalic margin having four median and three distal spines, between which groups the margin is provided with a number of spinulations. Median and caudal femora well spined ventrad; caudal metatarsi subequal to the remainder of the tarsal joints in length. All of the tarsi with distinct arolia between the claws.

General color of head, disk of pronotum, of greater portion of tegmina when in repose position over the thoracic segments, coxæ and of limbs raw sienna, the lateral portions of pronotum and marginal field of tegmina subhyaline. Dorsum of abdomen largely blackish mesad, the lateral portions of the segments increasingly of the general color distad; ventral surface of the abdomen mesad of the general color, broadly bordered laterad with blackish, very narrowly edged with the pale color, subgenital plate quite solidly and contrastingly blackish. Head with the eyes blackish brown; face marked with bone brown as follows: a clouded bar between the eyes, ventrad of this between the ocelli traces of another weaker one, between the antennæ arcuate line of six spots with another spot ventrad of each antennal scrobe and on each side a single similar one ventrad of this line; palpi tipped with bone brown; antennæ of the general color becoming darker distad. Pronotal disk with six pairs of points and a pair of small clouds of bone brown. Limbs marked with bone brown at the insertion of the spines and at the distal extremity of most of the tarsal joints.

Measurements.

Length of body	12.2	mm.
Length of pronotum	3.5	"
Greatest width of pronotum	5.3	"
Length of tegmen	5.8	"
Greatest width of tegmen	3.5	"

The type of this species is unique.

Subfamily NYCTIBORINÆ.

* Nyctibora glabra Giglio-Tos.

Alto Pencosa, Prov. of San Luis. Elev. 660 meters. December 22, 1908. (Jorgensen.) One male.

This species was described from Caiza and San Francisco, Bolivian Chaco,⁶ and is here recorded from Argentina for the first time. The

⁶ Boll. Mus. Zool. Anat. Comp. Torino, XII, No. 302, p. 9 (1897).

specimen fully agrees with the original description and bears a great superficial resemblance to species of *Periplaneta*.

Subfamily EPILAMPRINÆ.

Epilampra stigmatiphora Rehn.

Misiones, January 1, 1911, February 14, 1911, November, 1910, December, 1909, 1910 and 1911. (Jorgensen.) Ten males.

These specimens are almost all darker than the type, several with the markings considerably darker.

Epilampra verticalis Burmeister.

Misiones. December, 1909 and 1910. (Jorgensen.) Two males. Both of these specimens have the subgenital plate strongly asymmetrical and, in similar fashion, a projection extending toward the right side.

Subfamily BLATTINÆ.

Blatta orientalis Linnæus.

Buenos Aires. (Lizer.) One male.

Subfamily PANCHLORINÆ.

Panchlora thalassina Saussure and Zehntner.

Buenos Aires. (Lizer.) One female.

Misiones. January 3, 1910 (at light), November 16, 1909. Two females.

The Buenos Aires record is the most southern known for the species.

*Panchlora exoleta Burmeister.

Misiones. January 3, 1910, November, 1910. (Jorgensen.) One male, one female.

This is the first Argentine record of this widely distributed species, which previously had been recorded from localities extending from Mexico to Brazil.

Subfamily BLABERINÆ.

Monastria biguttata (Thunberg).

Misiones. May 20 and 23, 1909. (Jorgensen.) One male, two nymphs.

Blaptica dubia (Serville).

Buenos Aires. (Lizer.) Two males, one female, one nymph.

La Cumbre, Prov. of Cordoba. (Lizer.) One nymph.

Specimens have also been examined from Cruz del Eje, Prov. of Cordoba; Cordoba, Prov. of Cordoba; Carcaraña, Prov. of Santa Fe and Rosario.

Subfamily CORYDIINÆ.

Melestora fulvella Rehn.

Misiones. January 1, 1911. (Jorgensen.) Two males. Latindia argentina new species.

Type: σ ; Misiones, Argentina. January 14, 1910. (P. Jorgensen.) [Acad. Nat. Sci. Phila., type no. 5231.]

Apparently closer to L. pusilla Saussure and Zehntner (Biol. Cent.-Amer., Orth., I, p. 112) from Tarma, Peru, than to any other



Fig. 2.—Latindia argentina new species. Dorsal outline of pronotum of type. (×8.)

member of the genus, agreeing in having the ulnar vein similarly ramose toward the costal margin, but differing in the pronotum being more transverse elliptical with no truncation to the caudal margin, in the more numerous costal veins to the tegmina, in the subreniform shape of the anal field of the same and in the non-annulate antennæ.

Size small; form elongate elliptical; texture of surface coriaceous, largely short pilose. Head

with entire width of vertex visible cephalad of pronotum, the outline of occiput subtruncate; eyes large, interspace between them slightly greater than the depth of a single eye; antennæ moniliform. Pronotum transverse elliptical, the greatest length contained about one and three-eighth times in the greatest width; cephalic margin subtruncate, caudal margin gently arcuate, not at all truncate; a distinct medio-longitudinal sulcus present on almost the entire disk, the latter subimpressed and defined caudad by a subrectangulate indentation, the surface of the disk with about four pairs of oblique, very low strumose ridges; lateral portions of the pronotum subdeflected, the margins there distinctly cingulate. Tegmina elongate, surpassing the apex of the abdomen by more than a third of their

length, their greatest width (at distal third) contained nearly three times in their greatest length; costal margin very gently arcuate, distal margin rather narrowly rounded, sutural margin nearly straight; costal veins about fifteen in number, ulnar vein sending three rami toward the costal and distal margins, anal field abbreviate, occupying less than a third of the tegminal length, anal sulcus arcuate, oblique adventitious vein and impressed sulcus decided. Wings reaching to the tips of the tegmina. Subgenital plate broad, ample, with short lateral styles; cerci elongate, articulate.



Fig. 3.—Latindia argentina new species. Outline of left tegmen of type. (× 4.)

General color bone brown, the limbs paling to fawn color. Pronotum with the lateral portions sayal brown. Antennæ of the general color, non-annulate; eyes blackish.

Measurements.

Length of body	5.8	mm.
Length of pronotum	1.6	"
Greatest width of pronotum	2.2	"
Length of tegmen	7.0	
Greatest width of tegmen	2.6	"

The type is unique.

Subfamily OXYHALOINÆ.

Chorisoneura minuta Saussure.

Misiones. 1909. (Jorgensen.) One male.

This and Saussure's record of a specimen from Corrientes are the only ones with exact locality known for the species, which was originally described from the Pampas.

Family MANTIDÆ.

Subfamily ORTHODERINÆ.

Mantoida burmeisteri (Giebel).

Rio Salado, Prov. of Buenos Aires. Two males.

These specimens fully agree with the individuals from the Misiones previously examined by us, except that the coloration is somewhat darker. The present record considerably extends the range of the species, previously known only from Nova Friburgo, state of Rio de Janeiro, Brazil, and the Misiones territory of Argentina.

*Mantoida tenuis (Perty).

Mendoza, Prov. of Mendoza. January 17, 1905. (Haarup.) Three males.

This species was previously known only from Brazil.

Orthoderella ornata Giglio-Tos.

Jujuy, Prov. of Jujuy. December, 1911. (Jorgensen.) One male. This individual is the second male and third specimen known of this remarkable genus and species. Originally described in 1897 from the female sex, taken at Caiza in the Bolivian Chaco, the next record of its capture was made by Chopard, who first described the male sex from a specimen taken at Santiago del Estero, Argentina, in

⁷ Bull. Soc. Entom. France, 1911, pp. 141–143, figs. 1, 2.

January. The present individual fully agrees with Chopard's description and figure, except that our specimen is of a brownish instead of greenish phase of coloration.

Subfamily MANTINÆ.

Brunneria brasiliensis Saussure.

Misiones. February, 1911. (Jorgensen.) Three males.

Mendoza, Prov. of Mendoza. (Haarup.) One male, one female.

The Mendoza male is somewhat smaller than the Misiones individual of that sex, but otherwise inseparable. Two of the Misiones males are of a brownish phase of coloration, while the other specimens are greenish. Mendoza is the most southern locality from which the species is known.

Coptopteryx argentina (Burmeister).

Misiones. January, February, 1911; February 4, 1910, December, 1910. (Jorgensen.) Eleven males.

Buenos Aires. (Lizer.) One female.

These specimens vary considerably in size. The individual from Buenos Aires is the smallest female of the species we have seen, its measurements being: length of body, 52.5 mm.; length of pronotum, 17; greatest width of pronotum, 5.5; length of tegmen, 9; length of cephalic femur, 14.1; length of caudal femur, 16.8. The form of the pronotum in several is similar to or strongly approaches that of the Cordillera de Mendoza individual previously mentioned by us.⁸ In all of the present series the proximal portion of the marginal field of the tegmina is opaque rufous.

Coptopteryx gayi (Blanchard).

Mendoza. (Haarup.) One male.

La Cumbre, Prov. of Cordoba. (Lizer.) One female.

Buenos Aires. (Lizer.) One male, one female.

The Mendoza male has the limbs uniform greenish, while the Buenos Aires pair has them of the same color much mottled with brownish.

Miopteryx argentina Saussure.

Mendoza. November 18, 1904. (Haarup.) One male.

San Cornelia. November, 1911. (Jorgensen.) One male.

These apparently are the first exact records of this species, which was described from the "Argentine Pampas" and since reported from Brazil. The triangularly attenuate form of the cephalic section of the pronotum of this species is distinctive.

⁸ Proc. Acad. Nat. Sci. Phila., 1913, p. 287.

Thesprotia vidua Saussure and Zehntner.

Misiones. January, 1911, January 15, 1910, March 21 and 26, 1910, April 30, 1910, May 5, 1910, December, 1910. (Jorgensen.) Four males, five females.

Subfamily VATINÆ.

Parastagmatoptera unipunctata (Burmeister).

Tapia, Prov. of Tucuman. Elev. 800 meters. March-April, 1903. (G. A. Baer.) One female. [Hebard Coll.]

Buenos Aires. (Lizer.) One female.

The former is the most elevated locality from which the species has been taken. The distal extremities of the median and caudal femora and the adjacent portion of the tibiæ in the Tapia female are dark brownish, with which color the external face of the cephalic coxæ is also in large part blotched, the proximal portion of the corresponding femora also suffused with the same. The external face of the cephalic femora also has a median spot of brownish on the usual yellowish ground.

Stagmatoptera hyaloptera (Perty).

Tucuman, Prov. of Tucuman. March 16, 1911. (Jorgensen.) One male.

Misiones. March 11, 1907. (Jorgensen.) One female.

Family PHASMIDÆ.

Subfamily ANISOMORPHINÆ.

Agathemera crassa (Blanchard).

La Cumbre, Prov. of Cordoba. (Lizer.) One female.

A pair from Cruz del Eje in the same province have also been examined.

Subfamily CLITUMNINÆ.

Steleoxiphus catastates Rehn.

Misiones. April 12, 1910. (Jorgensen.) One female.

The present individual is slightly larger than the specimen previously recorded by us from the Misiones.⁹

*Ceratites laticeps Caudell.

Misiones. January, 1911. One female, one immature female.

These specimens agree completely with the original description of the unique type of the species and genus from Sapucay, Paraguay. The adult is of almost exactly the same dimensions as the type,

⁹ Proc. Acad. Nat. Sci. Phila., 1913, p. 301.

while the immature specimen is about three-fourths as long, with the subgenital opercule relatively less developed.

Family ACRIDIDÆ.

Subfamily ACRYDIINÆ.

Prototettix lobulatus (Stål).

La Cumbre, Prov. of Cordoba. (Lizer.) One female.

This is the first exact Argentine record from south of the Misiones.

Apotettix bruneri Hancock.

Jujuy, Prov. of Jujuy. February, 1911. (Jorgensen.) One male. Previously recorded by us from Embarcacion, Salta.

Subfamily EUMASTACINÆ.

*Masyntes tigris Burr.

Embarcacion, Prov. of Salta. April, 1911. (Jorgensen.) One female.

This specimen fully agrees with a male of the species from Corumbá, Brazil. Bruner's M. $brasiliensis^{10}$ appears to be very doubtfully distinct, as the differential characters given are very slight, the presumably different measurements being largely accounted for by different general size, and in consequence they are hardly proportional. The present specimen shows the following measurements:

Length of body	26.51	mm.
Length of pronotum	2.8	"
Length of tegmen	5.3	"
Length of caudal femur	14.5	"

This is the first Argentine record for the species.

Subfamily PROSCOPINÆ.

Tetanorhynchus humilis Giglio-Tos.

Misiones. September 7, 1910. (Jorgensen.) One male.

This specimen has been compared with a paratypic male from Caiza, Bolivian Chaco, and is identical except for its smaller size, which is a secondary matter in this group. The only previous Argentine record for the species was from San Lorenzo, Province of Jujuy (Giglio-Tos).

Tetanorhynchus borelli Giglio-Tos.

Jujuy, Prov. of Jujuy. April and October, 1911. Two males, two females.

¹⁰ Ann. Carneg. Mus., VIII, p. 6 (1911).

Cephalocœma costulata Burmeister.

Misiones. January, 1911, February 1, 11 and 14, 1911, March 22 and 24, 1910, April 5, 1910, November 1, 1910, December, 1910. (Jorgensen.) Four males, nine females, one immature male, three immature females.

Posadas, Misiones. (C. Schrottky.) One male.

Rio Tapenaga, Prov. of Sante Fé. One male.

Buenos Aires. (Lizer.) Five males, two females.

La Cumbre, Prov. of Cordoba. (Lizer.) Four immature males, four immature females.

Cephalocœma calamus Burmeister?

Tucuman, Prov. of Tucuman. March, 1911. (Jorgensen.) One male.

We refer the present specimen to this poorly understood species with a query. The fastigium is faintly tapering with the apex little blunted, which feature is not in accord with the original description, but this seems of minor importance, as there is some individual variation in this respect in the group. The size is appreciably less than that originally given for the sex (3\frac{3}{4} inches), but in this our specimen is very close to the male from Brazil measured by Brunner and tentatively referred by him to calamus.\frac{11}{2}

The original localities for this species were Villa Occidental, Gran Chaco and the Rio Apa.

Cephalocœma lineata Brunner.

Mendoza. (Haarup.) One male.

Tapia, Prov. of Tucuman. Elev. 600 meters. March-April, 1903. (G. A. Baer.) One female. [Hebard Coll.]

The Tapia record extends the range of the species to the northward.

Subfamily ACRIDINÆ.

Hyalopteryx rufipennis Charpentier.

Misiones. January, 1911, October, 1911, November 2, 1910. (Jorgensen.) Three males, four females.

La Cumbre, Prov. of Cordoba. (Lizer.) One male.

The La Cumbre record is the most southern known for the species.

Truxalis brevicornis (Johannson).

San Lorenzo, Prov. of Jujuy. October, 1911. (Jorgensen.) One female.

¹¹ Verh. k.-k. zool.-bot. Gesell. Wien., XL, p. 117.

Orphula pagana (Stål).

Misiones. January 15, 1911, February, 1911, October, 1911, December, 1910. (Jorgensen.) Four males, six females, one immature male.

Amblytropidia robusta Bruner.

Misiones. April 26, 1910. (Jorgensen.) One female.

Amblytropidia australis Bruner.

Buenos Aires. One female. [Hebard Coll.]

Parorphula graminea Bruner.

La Cumbre, Prov. of Cordoba. (Lizer.) One female.

Orphulella punctata (DeGeer).

Misiones. January, 1911, April 5, 1910. (Jorgensen.) One male, three females.

Posadas, Misiones. (Schrottky, no. 17.) One female.

Jujuy, Prov. of Jujuy. February, 1911. (Jorgensen.) One male.

Buenos Aires. One female. [Hebard Coll.]

Fenestra bohlsii Giglio-Tos.

Misiones. January, 1911. (Jorgensen.) One female.

La Cumbre, Prov. of Cordoba. (Lizer.) Three males, one immature female.

The males and adult female are of the usual brownish color phase, while the nymph has the head, pronotum and rudimentary tegmina and wings green with a fine medio-longitudinal yellowish line on the head and pronotum.

Staurorhectus longicornis Giglio-Tos.

Misiones. January and February, 1911. (Jorgensen.) Eight-males, four females.

One of the above females is of the phase with the dorsum of the head and pronotum unicolorous.

Scyllina picta (Bruner).

Misiones. January and February, 1911. (Jorgensen.) Six males, three females, one immature female.

Subfamily ŒDIPODINÆ.

Trimerotropis pallidipennis (Burmeister).

Jujuy, Prov. of Jujuy. December, 1911. (Jorgensen.) One female.

La Cumbre, Prov. of Cordoba. (Lizer.) One male.

Papipappus clarazianus Saussure,

Tucura Catanlil, Department of Limay Centro, Territory of Neuquen. (Lizer.) Two males, one female.

This species was described from the region between the Rio Negro and the Rio Chubut, which area lies southeast of where the present material was taken. No other records are known for the genus and species.

Paulinia acuminata (DeGeer). [Cælopterna acuminata of authors.]

Buenos Aires. One female. [Hebard Coll.]

Subfamily OMMEXECHINÆ.

Ommexecha servillei Blanchard.

Misiones. January, February and October, 1911, November, 1910, December 20, 1910. (Jorgensen.) Four males, eight females [three pairs in copula].

From this material it is evident that the species is dimorphic in wing length, all three pairs taken in copula differing individually in this respect, two pairs having the males brachypterous and the females macropterous and the other pair having the male macropterous and the female brachypterous. Of the unmated specimens one male and one female are macropterous and four females brachypterous. In the brachypterous individuals the apices of the tegmina vary from straight to strongly uncinate. From the present evidence it would appear that germari Burmeister is merely the macropterous phase of the present species, but we do not wish to establish this synonymy until we are better acquainted with Brazilian material of the genus. All of the present series are of a brownish coloration, some more blackish brown than others.

Spathalium stali Bolivar.

Posadas, Misiones. September, 1912. (Schrottky.) One female.

Græa monstrosa Bruner.

La Cumbre, Prov. of Cordoba. (Lizer.) One adult female, one immature female.

This striking form was previously recorded from the country between Bahia Blanca and Cordoba.

Subfamily LOCUSTINÆ.

Coryacris angustipennis (Bruner).

Posadas, Misiones. April 8, 1910. (Jorgensen.) One female. Misiones. April 8, 1910. (Jorgensen.) One male.

Diedronotus lævipes (Stål).

Misiones. January, 1911. (Jorgensen.) Two males, three females.

Diedronotus discoideus (Serville).

Misiones. March 19–29, April 13–30, May 30, June 12, July 1, 1910. (Jorgensen.) Five males, seven females.

All of the above specimens have the discoidal field of the tegmina more or less maculate.

Elæochlora viridicata (Serville).

Misiones. January 12–18, 1910, January, 1911, February 11, March 12 and 24, November, December, 1910. (Jorgensen.) Eight males, ten females.

La Cumbre, Prov. of Cordoba. (Lizer.) Two adult males, one immature male, one immature female.

The Misiones specimens bear out the facts previously stated by us¹² regarding the divergence of material from this locality from typical Buenos Aires individuals, the only difference from the points there noted being the lack of dull purplish on the humeral regions of two males and the but very faint indication of it in another. The La Cumbre adults are similar in form and coloration to Buenos Aires individuals, but the tegmina and wings are shorter. The nymphs show that the reduction of the median carina in this genus is a feature of specialization, as they have it strongly elevated and considerably arcuate.

Chromacris miles (Drury).

Misiones. March 21, December, 1910. (Jorgensen.) Three males, five females.

La Cumbre, Prov. of Cordoba. (Lizer.) One adult female, two immature females.

Buenos Aires. (Lizer.) One male, one female.

Zoniopoda iheringi Pictet and Saussure.

Misiones. January 12, February 10-28, 1910. (Jorgensen.) One male, four females.

*Zoniopoda tarsata (Serville).

La Cumbre, Prov. of Cordoba. (Lizer.) One male, one female. These specimens appear to be true *tarsata*, agreeing with material from Rio Grande do Sul, Brazil. Apparently this is the only Argentine record of true *tarsata*.

¹² Proc. Acad. Nat. Sci. Phila., 1913, p. 331.

Zoniopoda cruentata (Blanchard).

Misiones. December, 1910. (Jorgensen.) One male, one female. La Cumbre, Prov. of Cordoba. (Lizer.) Two males, three females, five immature specimens.

Zoniopoda omnicolor (Blanchard).

San Luis. One male. [Hebard Collection.]

Diponthus paraguayensis Bruner.

Misiones. January, 1911, February 11, March 16 and 19, 1910 (Jorgensen.) One male, five females.

Leptysma filiformis (Serville).

Misiones. January, 1911. (Jorgensen.) One male, one female.

Leptysma obsoura (Thunberg).

Misiones. January, 1911. (Jorgensen.) One male, one female.

*Stenacris interior Bruner.

Misiones. September 25, 1910. (Jorgensen.) One female. This species was previously known only from Corumbá and Cuyaba, Brazil, and Puerto Suarez, Bolivia.

*Inusia gracillima Giglio-Tos.

Misiones. January 30, 1911. (Jorgensen.) One male. Buenos Aires. Two females. [Hebard Collection.]

These are the first records of the species from Argentina.

Inusia pallida Bruner.

Misiones. January and January 30, 1911. (Jorgensen.) One male, two females.

These specimens are of the pale green phase of the type.

*Zygoclistron superbum Rehn.

Misiones. February 14, 1910. (Jorgensen.) One female.

This is the first record of the genus from Argentina. The species was described from Sapucay, Paraguay, and the present specimen has been compared with paratypes.

* Aleuas gracilis Stål.

Misiones. February, 1911. (Jorgensen.) One immature male. The present specimen appears referable to this species. The general characters are those of *gracilis*, although the caudal tibiæ are blackish distad.

This is the first record of the species from Argentina.

Abracris signatipes (Bruner).

Misiones. December, 1910. One male.

Schistocerca paranensis (Burmeister).

Yuto, Prov. of Jujuy. November, 1911. (Jorgensen.) One female.

Dichroplus elongatus Giglio-Tos.

La Cumbre, Prov. of Cordoba. (Lizer.) Two females.

Buenos Aires. One male, one female. [Hebard Collection.]

Dichroplus punctulatus (Thunberg).

Misiones. January 14, 1910, January, 1911, February 8, 1910, December, 1910. (Jorgensen.)

La Cumbre, Prov. of Cordoba. (Lizer.) One male, three females. One La Cumbre female has decided clear buffy patches on the caudal femora.

Dichroplus dubius Bruner.

Misiones. January, February, 1911. (Jorgensen.) Five males, nine females.

Dichroplus robustulus Stål.

Misiones. January, 1911, February 11, 1910, March 16, April 5 and December, 1910. (Jorgensen.) One male, eight females.

These specimens fully agree with the material previously recorded by us from the same locality.¹³

Dichroplus bergii (Stål).

Misiones. January and February, 1911, March 24, May 4 and 12, 1910, December, 1910. (Jorgensen.) Four males, eleven females.

La Cumbre, Prov. of Cordoba. (Lizer.) Two males, one immature male.

The caudal tibiæ are decidedly glaucous in all of the Misiones specimens and oil green in the La Cumbre individuals.

Leiotettix sanguineus Bruner.

Misiones. January, 1911. (Jorgensen.) One male.

This specimen is no larger than the Misiones male previously measured by us. 14

Leiotettix pulcher Rehn.

Misiones. January, 1911, December, 1910. (Jorgensen.) Three males, one female.

These individuals fully agree with the type and allotype.

*Scotussa rubripes Bruner.

Misiones. November and December, 1910. (Jorgensen.) Two females.

¹³ Proc. Acad. Nat. Sci. Phila., 1913, p. 345.

¹⁴ *Ibid.*, p. 346.

This is the first record of the present species from Argentina. The material fully agrees with topotypes from Sapucay, Paraguay.

Osmilia violacea (Thunberg).

Misiones. March 19, April 26, May 3-6, July 1, August 31, October 1, December, 1910. (Jorgensen.) Four males, ten females. San Lorenzo, Prov. of Jujuy. October 30, 1911. (Lizer.) One male.

Family TETTIGONIIDÆ.

Subfamily PHANEROPTERINÆ.

Burgilis missionum Rehn.

Misiones. January, 1911. (Jorgensen.) Two females. Hyperophora major Brunner.

Yuto, Prov. of Jujuy. November, 1911. (Jorgensen.) One male.

Ligocatinus olivaceus (Brunner).

Misiones. February, 1911. (Jorgensen.) Two females.

*Homotoicha fuscopunctata Caudell.

Misiones. October, 1911. (Jorgensen.) One female.

This specimen fully agrees with a female from Sapucay, Paraguay, the type locality, from which point alone the species was previously known.

Theudoria melanocnemis (Stål).

Misiones. January, 1911. (Jorgensen.) One male.

This specimen has the cephalic femora without black, which color is present elsewhere as usual in the species. The only previous Argentine record is that of the type from Buenos Aires. The other known records are from Montevideo, Uruguay, and Puerto Bertoni, Paraguay.

Scaphura nigra (Thunberg).

Tapia, Prov. of Tucuman. Elev. 600 meters. March-April, 1903. (G. A. Baer.) Two females. [Hebard Collection.]

One of these specimens is of the usual atro-chalybeous type, the other approaches variety B of Brunner.

Grammadera clara Brunner.

Misiones. January, 1911. (Jorgensen.) One male.

Buenos Aires. (Lizer.) Two males, one female.

This species was previously known only from Buenos Aires, and Montevideo, Uruguay.

Grammadera albida Brunner.

Misiones. February, 1911. (Jorgensen.) One male.

Phylloptera spinulosa Brunner.

Misiones. January 26, 1910, January, 1911. (Jorgensen.) Two males.

*Phylloptera alliedea Caudell.

Misiones. January, 1911, December, 1910. (Jorgensen.) Two females.

When compared with a topotypic female from Sapucay, Paraguay, the present material is seen to agree completely, except that the ovipositor is somewhat smaller, in length being 6.5 and 6.7.mm., instead of 8, as described and as in the topotype. This difference is probably geographic. The species is new to Argentina, previously being known only from the type locality.

*Microcentrum angustatum Brunner.

Misiones. October, 1910. (Jorgensen.) One female.

This is the first Argentine record for the present species, the previous records being Puerto Cabello and Brazil.

Subfamily PSEUDOPHYLLINÆ.

Dasyscelis normalis Brunner.

Buenos Aires. (Lizer.) One female.

Subfamily CONOCEPHALINÆ.

Caulopsis gracilis Redtenbacher.

Buenos Aires. One male. [Hebard Collection.]

The species has been recorded from localities extending from Cuba to Buenos Aires and Montevideo.

Neoconocephalus procerus Redtenbacher.

Buenos Aires. February, 1912. (Jorgensen.) One female.

This is the first record of the species subsequent to its description in 1891 on the basis of Buenos Aires material. The specimen in hand agrees perfectly with the description, but is slightly larger than the measurements there given for the same sex.

Neoconocephalus redtenbacheri Karny.

Tucuman. March 16, 1911. (Jorgensen.) One female.

This specimen is of the green phase. The tegmina are considerably and the caudal femora and ovipositor appreciably longer than the maximum measurements given by Karny, but otherwise the specimen fully agrees with individuals which are within the original measurements.

Neoconocephalus saturatus (Griffini).

Posadas, Misiones. (Schrottky, no. 16.) One male, one female. The recent acquisition of this and other material from various

portions of South America has enabled us to correct several of our previous identifications of specimens as belonging to this species. The material from Sapucay, Paraguay, 15 reported in 1907, we find on re-examination to be *N. vicinus* Karny, subsequently described from Rio Grande do Sul, Brazil, and Paraguay. The Buenos Aires female recorded by us 16 we now find to be the very closely related *N. fusco-marginatus* Redtenbacher.

* Neoconocephalus fuscomarginatus (Redtenbacher).

N. saturatus Rehn (nec Griffini), Proc. Acad. Nat. Sci. Phila., 1913, p. 375. Buenos Aires. January 14, 1909. (Jorgensen.) One male.

This is the first record of the species from Argentina, the previous records being from Curitiba, Brazil, and Montevideo, Uruguay.

Homorocoryphus viridis (Redtenbacher).

Misiones. January, 1911. (Jorgensen.) One female.

The only previous Argentine record is from Buenos Aires. The other known records are from Rio Grande do Sul, Brazil, and Montevideo, Uruguay.

Homorocoryphus kraussi (Redtenbacher).

Posadas, Misiones. Elev. 80 meters. March 6, 1909. (Jorgensen.) One female.

The only previous exact records of this species are those of the types from Theresopolis and Rio Grande do Sul, Brazil.

Family GRYLLIDÆ.

Subfamily GRYLLOTALPINÆ.

Gryllotalpa claraziana Saussure.

Mendoza. 1904–1905. (Haarup.) One female.

This is the first record of the species since its original description in 1874 from Argentina without exact locality. The types were males without apparent wings, while the present specimen has caudate wings, but in every other respect our individual is in accord with the description.

*Scapteriscus camerani Giglio-Tos.

Buenos Aires. One male.

This is the first record from Argentina for the species, which was previously known only from Paraguay.

Scapteriscus borellii Giglio-Tos.

Jujuy, Prov. of Jujuy. December 1, 1911. (Jorgensen.) Two females.

Proc. Acad. Nat. Sci. Phila., 1907, p. 390.
 Ibid., 1913, p. 375.

Embarcacion, Prov. of Salta. February, 1911. (Jorgensen.) One nymph.

La Cumbre, Prov. of Cordoba. (Lizer.) One male.

Mendoza, Prov. of Mendoza. February 12 and 27, 1908. (Jorgensen.) Two females.

The above records, with our previous ones from the Misiones and Chacras de Coria, Mendoza, and that of Giglio-Tos from San Lorenzo, Jujuy, constitute all the Argentine records of the species.

Nemobius (Argizala) hebardi new species.

When compared with N. (A.) brasiliensis, the present species is found to have a proportionately deeper pronotum, to be decidedly darker in general coloration and to have a decidedly shorter ovipositor.

Type: \circ ; Buenos Aires, Argentina. (C. Lizer.) [Acad. Nat. Sci. Phila., type no. 5276.]

Size very large for the genus; form compact; head rather large and rounded, but a little flattened in front. Maxillary palpi as in brasiliensis. Pronotum decidedly transverse, but not as much so



Fig. 4.—Nemobius (Argizala) hebardi new species. Outline of ovipositor of type. (X 12.)

as in brasiliensis, length contained nearly one and seventenths times in greatest (caudal) dorsal width, narrowing evenly, but not decidedly cephalad, and with a slight medio-longitudinal

sulcus on the cephalic portion. Tegmina elongate, with apex mediodorsal in position and sharply rounded; longitudinal veins conspicuous, cross-veinlets neither as heavy nor as conspicuous as in *brasiliensis*. Wings very long, considerably more than twice the tegminal length.

Ovipositor much shorter than in brasiliensis, scarcely more than half as long as caudal femur, rigid, straight, apex as in brasiliensis and very narrowly sublanceolate, with the margin of that portion formed by the dorsal valves straight and armed evenly with serrulations. Subgenital plate as in brasiliensis.



Fig. 5.—Nemobius (Argizala) hebardi new species. Outline of internal face of caudal tibia and tarsus of type. (× 5.)

Spines of caudal tibiæ 4 and 4 in number, long, but not as long as in brasiliensis, 6 distal spurs placed as in that species and of same proportions to each other and to the metatarsus, these portions being all distinctly more abbreviate than in brasiliensis.

Measurements (in millimeters).

Buenos Aires. Misiones. (Paratype.) (Type.) (Paratype.) Length of body..... 10. 10.210.21.8 1.9 Length of pronotum..... 1.7 Greatest (caudal) width of pro-3 3 notum..... 3.17 Length of tegmen 6.96.4Length of wing..... 14.9 14.7 14 Length of caudal femur 7.2 7 7.1Length of ovipositor..... 3.8 3.6 3.9

Though the color pattern is very obscure in these dark specimens before us, it shows a distinct similarity to that of the usually pale brasiliensis, in which species the color pattern is, as a result of the pale general coloration, usually decidedly recessive. In the present species the general coloration is bister, with intermediate channel of tegmina, under parts of body and limbs buffy, the latter flecked with bister dorsad. The occiput is bister striped with three narrow buffy longitudinal lines. The maxillary palpi are pale, clothed with dark hairs and with distal portion of terminal joint briefly infuscated. The entire lower portion of the face and lateral lobes of the pronotum are buffy.

In addition to the type we have examined, a female bearing the same data and one from the state of Misiones, Argentina, taken in February, 1911, by P. Jorgensen. These specimens are all in the collection of The Academy of Natural Sciences of Philadelphia.

We take pleasure in dedicating this species to our co-worker, Mr. Morgan Hebard, whose masterly paper on the North American species of this genus has placed the study of the group on a permanent basis, making possible, by its comprehensive treatment of the subject, the study of the genus as a whole.

Gryllus argentinus Saussure.

Misiones. January, 1911. (Jorgensen.) Two females.

Jujuy, Prov. of Jujuy. April and December, 1911. (Jorgensen.) Two females.

La Cumbre, Prov. of Cordoba. (Lizer.) Three females.

Chacras de Coria, Prov. of Mendoza. Elev. 936 meters. January 9 and 11, 1907 and 1908. (Jorgensen.) One male, two females.

Of this series the Jujuy and Misiones individuals have caudate wings, the others have abbreviate wings. The La Cumbre specimens are more uniformly colored than the others, the Chacras de Coria individuals showing more contrast between the general coloration and that of the tegmina, one with strongly marked pale tegminal bases; the Misiones representatives are generally pale, while the Jujuy ones are dark with marked pale humeral lines. It seems very probable that fulvipennis Blanchard is but a form of this species. The abbreviate wings, supposed to be characteristic of fulvipennis, we find to be individual in this as in numerous other species of the genus, and sufficient specimens are in hand to show that the relative proportionate length of the caudal femora and ovipositor varies appreciably, as in other forms of the genus.

Gryllodes laplatæ (Saussure).

Mendoza. 1904–1905; February 20, 1907. (Haarup.) One male, one female.

These specimens are inseparable from individual taken at Carcaraña, Province of Santa Fé.

*Phylloscyrtus canotus Saussure.

Buenos Aires. (Lizer.) One male.

This is the first Argentine record of the species, which was originally described from "Brazil."